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Lawrence Morrin
Regional Director
Bureau of Indian Affairs
Southwest Regional Office
P.O. Box 26567
Albuquerque, NM 87125

Dear Mr. Morrin:

On July 25, Dave Conklin of our staff met with Randy Baker (Northern Pueblos Agency) to evaluate a proposed dwarf mistletoe control project on the Picuris Pueblo. The proposed treatment area (Stand 771-031) is a 15-acre ponderosa pine stand on the south side of the Booster Road, above Picuris Canyon. The Booster Road area, like many other ridgetops along the western face of the Sangre de Cristo Mountains, has a very high incidence of ponderosa pine dwarf mistletoe, *Arceuthobium vaginatum*.

A large timber sale was conducted in the Booster Road area around 1980. Most stands, including Stand 31, were selectively harvested, leaving scattered overstories of mistletoe-infected trees. (In hindsight, it probably would have been better to have removed *all* the infected overstory trees from some stands, including this one, during the sale). Other than this commercial harvest 25 years ago, Stand 31 has never been thinned. Presently, most trees are small pole and sapling-size (1" to 8" dbh), with stocking in excess of 1000 stems/acre in many portions. Based on our recent examination of this area, more than 95% of trees 4" dbh and larger are visibly infected.

Heavily-infected young tree

Management options for heavily-infected stands such as this are limited. Often deferring such areas from treatment is the most reasonable option. However, the majority of the "commercial" forest at Picuris—which is only a few hundred acres in size—is heavily infected. Stand 31 is one of the Tribe's most easily accessible and (potentially) most productive sites.

A standard thinning to reduce densities would be expected to exacerbate the mistletoe problem, since the disease intensifies more rapidly after stands are "opened-up." Complete "stand replacement" (clearcutting or burning at high intensity, and re-planting), would be costly and probably impractical on a relatively harsh site such as this. A third option, what might be called an "irregular shelterwood," would involve a heavy thinning, retaining only 20 to 40 of the largest, and most vigorous trees per acre on a varied spacing.

The shelterwood option would retain some forest cover on the site, while removing the majority of trees that have little chance of becoming sizable (> 10-12" dbh) in the future. This option would generate a considerable amount of firewood for the Tribe, although a large amount of material (slash) would still need to be burned or chipped on site to reduce hazardous fuels. If the Tribe decides to pursue this option, and funding becomes available for implementation, Dave would be available to help with "leave tree" marking of the stand.

Please contact us if you have any questions about this evaluation or need additional assistance.

Sincerely,

/s/ Debra Allen-Reid
DEBRA ALLEN-REID
New Mexico Zone Leader, Forest Health

cc: Leonard Lucero, John Anhold

John Waconda, Southwest Regional Office, BIA; Randy Baker, Northern Pueblos Agency